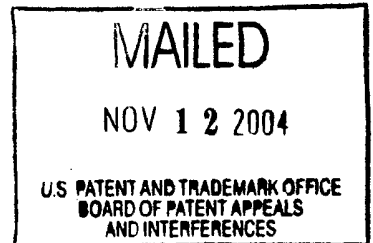


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CARLOS ERNESTO KOSTER



Appeal No. 2004-2378
Application No. 09/623,008

ON BRIEF

Before OWENS, KRATZ and TIMM, Administrative Patent Judges.
KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 3 and 5, which are all of the claims pending in this application.

BACKGROUND

Appellant's invention relates to a method of treating goods with carbon dioxide and nitrogen gases wherein the treating gases are obtained from a gas source that has been used for motive

power generation or from a boiler exhaust gas in an oil extraction plant. As explained in appellant's specification, treating stored goods, such as cereal, to an atmosphere of nitrogen and carbon dioxide is inhospitable to life forms such as insects and mushrooms, the proliferation of which in contact with such food grains is harmful to the quality and ultimate usefulness of the stored food product. See, e.g., the paragraph bridging pages 1 and 2 through page 3, line 2 of appellant's substitute specification. A further understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A method for the treatment of goods with carbon dioxide and nitrogen comprising: generating said carbon dioxide and nitrogen at a location of said goods by washing, filtering, cooling and catalyzing of other gas sources; and

wherein said location of said goods is a transportation vessel having a source of motive power generating said other gas sources.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Banks et al. (Banks)	5,300,265	Apr. 05, 1994
Fiorenzano, Jr. (Fiorenzano)	5,326,543	Jul. 05, 1994

Claims 1, 3 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Banks in view of Fiorenzano.

We refer to the brief and reply brief and to the answer for a complete exposition of the opposing viewpoints expressed by appellant and the examiner concerning the issues before us on this appeal.

OPINION

Having carefully considered each of appellant's arguments set forth in the brief and reply brief, appellant has not persuaded us of reversible error on the part of the examiner. Accordingly, we will affirm the examiner's rejection for substantially the reasons set forth by the examiner in the answer. We add the following for emphasis.

Claims 1 and 5

Appellant has grouped claims 1 and 5 together (brief, page 3) and has not furnished separate arguments for those grouped claims as correctly noted by the examiner at page 2 of the answer. Consequently, we select claim 1 as the representative claim on which we shall decide this appeal as to that claim grouping.

Banks discloses a method, similar to appellant's representative claim 1 method, wherein a carbon dioxide and nitrogen containing gas source is generated using a combustion engine and, after purification, the gas is used for treating

goods, such as stored grains or other foodstuffs to prevent deterioration thereof. See, e.g., column 1, line 16 through column 2, line 9, column 4, line 62 through column 5, line 56 and drawing Figure 1 of Banks. We note that appellant does not argue that the washing, filtering, cooling and catalyzing steps of claim 1 patentably distinguish over Bank's gas source purification steps for making an acceptable carbon dioxide and nitrogen containing treating gas for foodstuffs.

Banks teaches that the exhaust gases that are purified to form the stored goods treating gas are generated using an engine that also supplies a source of power. See column 4, lines 65-68 of Banks. Moreover, Banks (column 5, lines 54-56) discloses that the exhaust gas generating apparatus can be made to be transportable.

The examiner additionally relies on Fiorenzano for showing that grains are known to be stored in transport ship cargo holds as well as other locations in a controlled atmosphere to prevent or reduce the growth or biological activity of insects, fungi and other life forms, the activity of which life forms is harmful to the stored foodstuff whether in a ship hold or in a silo. Based on the combined teachings of Banks and Fiorenzano, including that well-known need to protect grains stored in transport ship holds

as evidenced by Fiorenzano, we agree with the examiner that it would have been prima facie obvious to one of ordinary skill in the art to employ a transportable motive power and combustion gas generating engine of a grain carrying ship as the source of an oxygen deprived carbon dioxide and nitrogen containing treating gas for the stored grain in such a ship. The suggestion and reasonable expectation of success for such a method of treating grain stored in a ship hold is provided by Banks' teachings with regard to using combustion gas produced by a power generating engine as a source of stored grain treating gas.

Appellant argues that Banks does not teach using the engine for motive power and that Fiorenzano does not teach producing stored grain treatment gases with a motive power engine (reply brief, page 4). However, the rejection is not based on an anticipation theory over either Banks or Fiorenzano alone, but rather on an obviousness theory based on the combined teachings of those references under § 103(a). Appellant's argument that "Banks does not teach using an 'engine' which is performing a separate primary power function plus using its exhaust for treatment gases" (reply brief, page 3) is undercut by Bank's teaching at column 4, lines 65-68 of the patent. While Banks does not explicitly describe locating the stored goods in a

transportation vessel and using a power source of the vessel that has a primary function of providing motive power for also generating the combustion gases, we note that representative claim 1 is not so limited.¹ Moreover, the § 103(a) rejection advanced by the examiner is not based on the teachings of Banks alone under an anticipation theory but rather is based on the reasonable suggestions furnished in the combined teachings of the applied references as they would have been understood by one of ordinary skill in the art. In this regard, we again note that Banks teaches that "[t]he apparatus is adapted to be transportable and self-contained though can be readily integrated with other power sources" (column 5, lines 54-56). Matching such a power source and grain storage atmosphere generating device as taught in Banks with a need would have been well within the ambit

¹ In this regard, while Banks may not explicitly describe the power supplied by the engine as a "primary" function of the engine, neither is appealed representative claim 1 limited to the source of motive power used in generating said other gas sources having a "primary" function as the source of motive power. We note that the "comprising" language of claim 1 leaves that claim open to include other sources of motive power for the transportation vessel other than the source of motive power used in generating said other gas source. Further concerning this matter, we observe that Banks teaches "[t]he apparatus is adapted to be transportable and self-contained though can be readily integrated with other power sources" (column 5, lines 54-56). That disclosure of Banks is consonant with employing more than one motive power source as within the scope of claim 1.

of one of ordinary skill in the art given the additional evidence furnished in Fiorenzano concerning the well-known need to protect grains stored in transport ship holds.

Appellant (brief, pages 3 and 4) asserts that Fiorenzano teaches away from the claimed invention because using non-oxidizing nitrogen and carbon dioxide gases in treating stored grains is a part of the disclosed prior art background disclosure of Fiorenzano rather than the portion of Fiorenzano's disclosure that represents Fiorenzano's disclosed invention.

"A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." In re Gurley, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994). Here, based on the overall teachings of the applied references including Fiorenzano as they would have been understood by one of ordinary skill in the art, there is ample motivation for one of ordinary skill in the art to have selected the same engine for generating the combustion gases used for making the controlled atmosphere for grain storage as is used for supplying motive power for the reasons advanced above. One of ordinary skill in the art would be motivated by the economy of

making full use of the product of such an engine as well as by the express teachings of Banks discussed above. That there exists an option of using different materials for furnishing an atmosphere for storing grains as described in the preferred embodiments as invention in Fiorenzano is clearly not an impediment to, or teaching away from, using the prior art gas storage atmosphere as another alternative for protectively storing foodstuffs such as grains.

Claim 3

Regarding claim 3, appellant urges that neither Banks or Fiorenzano teach using exhaust gases of an on site combustion system (boiler system for an oil extraction plant) as a source gas for the treatment of goods. At the outset, we note that it is axiomatic that consideration of the prior art cited by the examiner must, of necessity, include consideration of the admitted state of the art found in appellant's specification. In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 687 (Fed. Cir. 1986); In re Davis, 305 F.2d 501, 503, 134 USPQ 256, 258 (CCPA 1962).

Here, appellant acknowledges at page 4, last paragraph of the substitute specification that oil extraction plants are known to include boilers that generate combustion exhaust gases that

are emitted to the atmosphere. Given the generic teachings of Banks referred to above concerning the use of combustion devices to generate a source of exhaust gases for obtaining grain storage treatment gases and the well known availability of combustion devices such as boilers that also are used for other functions such as oil extraction, we agree with the examiner's obviousness conclusion because it would have been prima facie obvious to employ combustion gases from such a boiler as the source of exhaust gases containing carbon dioxide and nitrogen for obtaining oxygen deprived treating gas for grain stored near such a facility. One of ordinary skill in the art would have found direction in Bank's teaching that other combustion devices may be employed in providing the source gases for forming the treating gas. In other word, Banks would have made clear to one of ordinary skill in the art that an available source of combustion exhaust gases, such as known boiler exhaust gases, are acceptable sources for generating the low oxygen content treating gas for grain storage located nearby. Appellant's argument boils down to asserting a lack of a description of the claimed subject matter in the cited references. However, as stated with respect to the examiner's rejection of claims 1 and 5 above, anticipation is not the basis of the rejection before us.

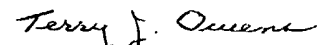
Having reconsidered the evidence of record for and against a conclusion of obviousness in light of the respective arguments advanced by appellant and the examiner, it is our determination that, on balance, the evidence weighs most heavily in favor of an obviousness conclusion with respect to the rejection under consideration.

CONCLUSION

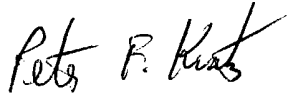
The decision of the examiner to reject claims 1, 3 and 5 under 35 U.S.C. § 103(a) as being unpatentable over Banks in view of Fiorenzano is affirmed.

No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED



TERRY J. OWENS
Administrative Patent Judge



PETER F. KRATZ
Administrative Patent Judge



CATHERINE TIMM
Administrative Patent Judge

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APPEAL NO. - JUDGE KRATZ
APPLICATION NO.

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DECISION: **ED**

Prepared By:

DRAFT TYPED: 08 Nov 04

FINAL TYPED: